REMARKS/ARGUMENTS

35 USC Section 112 Rejections

Regarding the 35 U.S.C. Section 112, first paragraph rejection, Applicants stated in the Amendment filed on September 29, 2008 that page 1-9 of Cisco MetroPlanner indicates types of routing strategies. The Examiner stated that there is no page 1-9 of the Cisco MetroPlanner and that the Cisco MetroPlanner is indexed by chapters and sections. Applications would like to clarify that while the Cisco MetroPlanner is indeed indexed by chapters and sections, the Cisco MetroPlanner also includes white-colored page numbers shown in black boxes in the lower left-hand side or lower right-hand side of the pages. For example, referring to Chapter 1, Section 1.6.3 (ROADM Traffic Groups), the bullet "Routing Strategy" (immediately following Figure 1-4) is on page 1-9 (shown in the lower right-hand corner of the page).

With regard to how the present invention uses tools such as the Cisco MetroPlanner to define a recommended route at the time of operation of a digital network, paragraphs 16 and 17 describe how a software planning tool such as the Cisco MetroPlanner may be used to investigate route possibilities (e.g., Chapter 1, Section 1.6.3, "Routing Strategy"). Figure 3B and paragraph 23 of the specification describes multiple "connections that can be defined by a planning tool," where the connections are "supported by the same network equipment." With such "information provided from the planning stage, the operation processes can be instructed to allocate one of the two paths of Fig. 3B when a new connection route is desired." Paragraphs 26 and 27 of the specification show an example format (table) for a list of recommended routes (LoRR), where "each entry indicates a recommend route that can be allocated at the operation stage." Paragraph 28 further details how during operation the operation process utilizes the LoRR, which was created before operation, during the planning stage.

35 USC Section 103 Rejections

Claims 1, 21, 22, and 24 are the only remaining independent claims in the present application. Each of these claims includes a limitation neither disclosed by, nor made obvious in view of the prior art references. For example, each independent claim recites the combination of

"using a network planning tool prior to a time of operation of the digital network to define a plurality of recommended routes," "generating a list of the recommended routes prior to the time of operation," "selecting one of the recommended routes," and "allocating the selected recommended route at the time of operation of the digital network."

As described in the previous Amendment (filed September 29, 2008), Blouin in view of the Cisco MetroPlanner does not teach or suggest using a network planning tool prior to a time of operation of the digital network to define a recommended route. Blouin does not disclose any use of a planning tool or network planning information. In contrast, Blouin is concerned only with analysis of routes at a time of operation of the network in order to allocate a new route. This teaches away from the present invention which uses a "network planning tool prior to a time of operation of the digital network to define a plurality of recommended routes." Blouin does not even mention a planning tool or a planning stage of a network design. This is to be expected from the prior art where routing selection has been sharply divided into either planning or operation stages.

Thus, it is not a showing of "obviousness" to merely identify one reference that deals with planning stage routing (e.g., the Cisco MetroPlanner) and another reference that deals with real-time, or operation stage routing (e.g., Blouin). There are many such independent references in the prior art and their existence apart from each other reinforces the non-obviousness of combining them, particularly in view of the unexpected benefits that can be achieved, some of which are described in the specification as follows:

> [06] The planning tools tend to use more sophisticated routing algorithms than operational control software. The planning tools also benefit from knowing upfront future traffic details that allow design of a more efficient overall network. Today's operational control systems often lack detailed optical engineering characteristics and are inadequate to handle reconfigurable optical networks. For example, operational controls may fail to determine when optical impairments necessitate regeneration of a signal along an optical path.
> [20] . . . This allows processes at the operation stage to take advantage of sophisticated simulation results from planning tools to determine problems such as when an optical impairment requires regeneration of a signal along an optical path. Other advantages can be realized.

> [23] . . . Thus, with information provided from the planning stage, the
> operation processes can be instructed to allocate one of the two paths of Fig.
> 3B when a new connection route is desired. This allows the network to be
> configured for maximum volume rather than shortest path. A decision can be
> made by the NOC or by a node process to allocate according to volume or
> speed at the time that allocation is requested.   Many such network
> optimization advantages and other advantages can be obtained. Figs. 3A and
> 3B are but one type of simplified example.

Accordingly, converting the operation stage routing process of Blouin to accommodate a
planning stage routing process would substantially change the principle of operation of Blouin,
and such a conversion would require a substantial redesign of Blouin.

Therefore, it would not be obvious to combine Blouin with the Cisco
MetroPlanner, and the independent claims as amended are allowable over Blouin in view of the
Cisco MetroPlanner for at least these reasons.

Furthermore, Blouin cannot be combined with the Cisco MetroPlanner to provide
the present invention, as claimed. Blouin fails to teach or suggest "generating a list of the
recommended routes prior to the time of operation," "selecting one of the recommended routes,"
and "allocating the selected recommended route at the time of operation of the digital network."
The Cisco MetroPlanner is not concerned with "generating a list of the recommended routes
prior to the time of operation." Accordingly, even if Blouin were substantially redesigned to be
combined with the Cisco MetroPlanner, the combination would still fail to teach or suggest the
claimed combination, including "generating a list of the recommended routes prior to the time of
operation," "selecting one of the recommended routes," and "allocating the selected
recommended route at the time of operation of the digital network."

Therefore, the independent claims as amended are allowable over Blouin in view
of the Cisco MetroPlanner for at least these reasons.

To clarify a couple of points made in the September 29, 2008 Amendment,
Applicants did **not** agree that the Cisco MetroPlanner teaches how to define a recommended
route and did **not** agree that the Cisco MetroPlanner teaches allocating the recommended route at
the time of operation of the digital network, as suggested by the Examiner. On the contrary,
referring to the September 29, 2008 Amendment, Applicants stated on page 6, third paragraph:

Applicant agrees that the Cisco MetroPlanner™ and various other
planning tools available at or about the time of filing the present application were
not used "for defining a recommended route at the time of operation of a digital
network." Rather, **Applicant's specification teaches how** to use traditional
planning tools such as the Cisco MetroPlanner™ **to "define a recommended
route" and then "allocating the recommended route at the time of operation
of the digital network." (Emphasis added.)**

Applicants respectfully submit that Applicants' statements about the Cisco MetroPlanner **should
be distinguished from** Applicants' statements about the invention as described in the
Applicants' specification, and Applicants apologize for any confusion.

Furthermore, Applicants did **not** admit that the function of defining a
recommended route was well-known in order to design network traffic routes at a planning stage,
as suggested by the Examiner. On the contrary, referring to the September 29, 2008
Amendment, Applicants stated on page 6, second to the last paragraph:

The specification clearly teaches one of ordinary skill in the art
how to make and use the claimed invention **without undue experimentation**. By
way of illustration, a copy of "Cisco MetroPlanner DWDM Operations Guide,
Software Release 2.5, October 2004 (the most relevant documentation available to
the undersigned at this time)" is included in an Information Disclosure Statement
provided with this Response. **Page 1-9 of the document indicates types of
routing strategies** that can be used to generate recommended routes. This
function was well-known to network planners at the time of filing the present
application in order to design network traffic routes at a planning stage.
(Emphasis added.)

Applicants respectfully submit that Applicants' statements about the Cisco MetroPlanner should
be distinguished from Applicants' statements about the invention as described in the Applicants'
specification, and Applicants apologize for any confusion. Applicants' point of the paragraph
was to address the 112 rejection by clarifying that the "specification clearly teaches one of
ordinary skill in the art how to make and use the claimed invention without undue
experimentation." Page 1-9 of the document was used as an example of "routing strategies" that
the present invention can use to generate recommended routes. To further clarify, referring to
page 1-9 of the Cisco MetroPlanner, a "routing strategy" is described, where the routing strategy
"defines the maximum number of allowed connectivities, and the way the connectivities are

routed." Also, various "options" are described. There is no specific mention of using a network planning tool prior to a time of operation of the digital network "to define a plurality of recommended routes," as claimed. In other words, it is the present invention as claimed which provides recommended routes. Applicants apologize for the ambiguity.

Applicants respectfully submit that the present claims are in condition for allowance and an early Notice of Allowance is earnestly sought. The undersigned may be contacted at the telephone number below at the Examiner's convenience if it would help in the prosecution of this matter.

Respectfully submitted,

TRELLIS INTELLECTUAL PROPERTY
LAW GROUP, PC

Date: February 15, 2009

By____/ Joseph L. Acayan /____
Joseph L. Acayan
Reg. No. 52,402
Tel.: 650-842-0300